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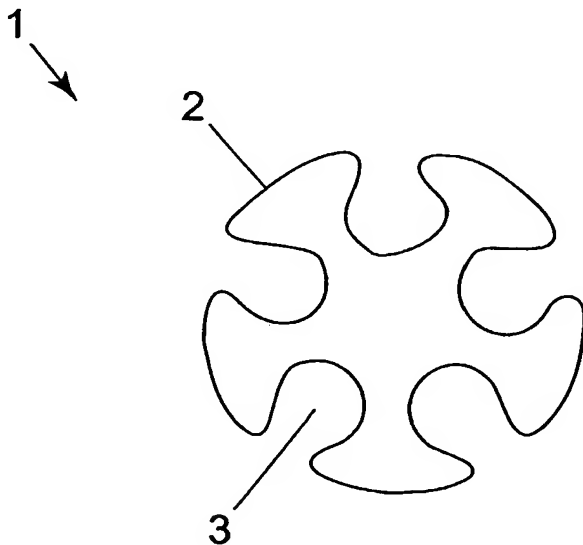
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- (71) Applicant (for all designated States except US): **ALBANY INTERNATIONAL CORP.** [US/US]; 1373 Broadway, Albany, NY 12204 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **LUO, Shuiyuan** [CN/US]; 685 East Seneca Turnpike, Syracuse, NY 13205 (US). **BILLINGS, Alan** [US/US]; 18 Kingswood Drive, Clifton Park, NY 12065 (US). **JOSEF, Michael** [US/US]; 5 Devonshire Way, Clifton Park, NY 12065 (US).
- (74) Agent: **SANTUCCI, Ronald, R.**; Frommer Lawrence & Haug LLP, 745 Fifth Avenue, New York, NY 10151 (US).
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(54) Title: SHAPED MONOFILAMENTS WITH GROOVES AND THE FABRICS MADE THEREOF



(57) Abstract: A monofilament with longitudinally oriented grooves and fabrics made thereof having reduced air permeability, wherein the reduced permeability is achieved without using additional coatings or stuffer yarns. Bicomponent monofilaments made from these grooved monofilaments using solution or wire coating have improved coating adhesion and may also include a conductive coating. In addition, the grooved bicomponent monofilaments may include a wear-indicating mechanism. Also disclosed are monofilaments with grooves formed in its surfaces. Advantageously, these grooved monofilaments exhibit improved adhesion to "sheet-grip" coatings, as compared with circular monofilaments. In addition, fabrics comprising these grooved monofilaments demonstrate improved air handling. The grooved monofilaments may be incorporated in a fabric as MD yarns, CD yarns, or both CD and MD yarns.